Clinical Section

* Common Failures of Diagnosis in Medical Practice

By

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I do not deal here with failures of diagnosis in rare or recently described diseases. I have in mind only the failures you and I often make in not recognizing common diseases when we should do so. In introducing this subject for discussion, one may profitably try to analyse in a general way the reasons for such failure and so may sometimes prevent diagnostic errors in the future.

Insufficient care in the history taking and *insufficient care in the ordinary physical examination* are obviously responsible for the majority of such errors. The bedrock of diagnosis is now, and will remain, a careful history and a careful physical examination. The patient comes to us because he feels something wrong—he has certain symptoms; we so often do not take the necessary time and care to elicit the onset and progress of these symptoms.

We forget a clue may be given in the *family history* or in the patient's *previous illnesses.* In some families there is a history of repeated heart failure or of apoplexy; in others, of nervous disease or even of insanity; in still others tuberculosis, pernicious anaemia, goitre or migraine may be present. The general build and weight of the parents may have a bearing.

The *previous history of the patient is time-consuming,* yet we must let the patient tell it in his own way, directing merely the flow of talk but avoiding leading questions. As I get older, I take more time in history taking; in so many diseases the whole diagnosis lies in the history. Think how often the physical examination, however careful, may be negative, yet the history may unmistakably reveal angina pectoris, peptic ulcer, gall bladder colic, renal calculus, beginning stenosis of the large bowel, migraine, increased intracranial pressure. Remember how an almost forgotten attack, years ago, of severe epigastric pain followed by jaundice may clear up the diagnosis of an obscure dyspepsia; remember how a trivial and unconsidered injury to the head in falling—too unimportant, apparently, to be mentioned without direct enquiry—may weeks later in subdural haemorrhage give rise to otherwise inexplicable nervous symptoms, demanding immediate operation. Quite apart from the obvious benefit to our patients—the main consideration—we should surely find a deep satisfaction in trying from the history alone to form a tentative diagnosis—we should as the history proceeds, pass in review the possibilities, discarding some, probing by skilful questioning, other possibilities. We miss the keenest pleasures of our calling if we do not adopt *the detective attitude* in our history taking—and our mistakes in diagnosis multiply.

Like any worth-while pursuit, *history taking improves with practice,* as any one of you can readily verify by turning up your old case records.

May I suggest that in general practice too often *the physician has no general history of his patient*—he has notes only of the individual special ailments for which he has attended. It would prevent many a mistake were the rule adopted deliberately by the general practitioner on some occasion, *early in the attendance, to get a careful previous history* of his patient and duly record this in writing.

Previous operations, especially abdominal though sometimes on the breast, should be carefully enquired into. The recent change of heart of leading surgeons in regard to operation in cholecystitis further illustrates the importance of a careful history—even in undoubted cholecystitis, to operate only where there is a clear-cut history of recurring attacks of colic.

During the history taking *we size up what manner of man* our patient is; we all *form unconsciously a general impression of our patient,* which is very valuable, but this should be *supplemented by a deliberate and conscious survey.* We note the highly strung individual as contrasted with the placid, easy-going type and we instinctively feel that behind the latter's complaints, organic disease is usually to be found while the former's symptoms may possibly enough be nervous in origin. *The build of the patient* often gives us a clue; the long narrow chest with sagging organs is much more often associated with functional abdominal complaints than when the patient has a broad chest with the abdominal organs slung high. In our general survey, one often gets a hint which we may miss in the detailed examination to follow. Exophthalmic goitre, myxoedema or other endocrine disturbance may be apparent at a glance or may, at least, be suspected. The curious lemon tint so often seen in pernicious anaemia contrasts at once with the pallor of secondary anaemia and with the grayer tint of malignant disease. Slight jaundice otherwise unnoticed may be apparent. The fixed unwinking expression may betray an old attack of encephalitis or a beginning paralysis agitans.

We insist on the importance of the general inspection of the patient because of the *tendency to begin immediately to examine the part of the body to which symptoms are referred.* So we far

* Read at the Annual Meeting of the Manitoba Medical Association, Winnipeg, May, 1936.

too often ignore a tendency to *overweight* and overlook entirely the serious consequences of obesity in middle and advanced age. Life insurance statistics show that at 40, 15% overweight increases the mortality 10%, while 30% overweight increases it by 40%. Imagine a condition amenable to surgery which shortened the span of life so greatly and consider what a rush there would be to operation. Nor does the shortening of life expectancy tell the whole tale against obesity. The efficiency and comfort of the individual is so often greatly impaired. Diabetes, degenerative disease of the cardiovascular system, gall stones, hernia, diverticulitis, bronchitis, osteoarthritis and myalgia are all more common in obese subjects, while the death rate from operation is increased. There is the less excuse for our failure to recognize and treat obesity because the dietetic treatment is now quite standardized on a rational basis.

From the general survey we pass to the *general examination.* In but few medical diseases, is it safe to make a purely local examination. *Strip the patient* and make a general examination. The general practitioner should have a definite record of such an examination at least once thoroughly made, and with patients seen casually a fertile source of error is the absence of a general examination. *I pass in rapid review the most common omissions,* as I see it, *in our examinations.*

We *often are not systematic* and *do not deliberately consider all the systems.* We are prone to forget the *endocrine system* and should make a point somewhere in our examination to include it. The *spine* is too often forgotten and yet may explain puzzling pains referred to the abdomen; its mobility should be tested. *Rectal examination* is often overlooked; an unexplained anaemia may be due to overlooked haemorrhoids but still more often the *patient's diagnosis of haemorrhoids* is accepted too readily; malignancy of bowel, secondary deposits in Douglas' pouch, inflammatory pelvic masses, ischio rectal fistula and prostatic disease—all conditions often recognizable if one but examine with the finger—are unpardonably overlooked. The *condition of the reflexes,* especially the knee jerk, the light reflex in the eye, the abdominal reflexes, and the sole response are too often forgotten; the investigation of the *circulation in the lower extremities* is but seldom seriously considered and yet may explain some puzzling pains in the legs and feet. The subcutaneous *glands* should be rapidly palpated—often the discovery of hitherto unnoted glands may give the diagnosis of Hodgkin's disease or of leucaemia or of malignancy. It takes but a moment to palpate for *enlarged spleen,* a finding which may greatly aid in the diagnosis of subacute bacterial endocarditis or leucaemia and may exclude a diagnosis of malignancy, otherwise probable.

We should examine with special care the part of the body to which the patient refers his symptoms. Microscopic examination of the centrifuged urine should be part of every thorough examination; again and again, the discovery of pus or blood in the urine clears up an otherwise obscure diagnosis. I need not remind you that even the grosser error of overlooking sugar or albumen is not so exceptional.

The presence of myalgia of the abdominal wall is still apt to be overlooked and misinterpreted.

High blood pressure is often diagnosed erroneously—the mere rise of systolic pressure even to a considerable height, say 160 to 180, does not justify the diagnosis of essential hypertension, if the diastolic pressure is below 90 or possibly, at times, even below 100. The diastolic blood pressure should be taken sytematically, for on its rise mainly depends the strain on the cardiovascular system and so the prognosis. A high systolic, combined with a low diastolic, blood pressure, suggests exophthalmic goitre, aortic regurgitation, arteriosclerosis of the aorta sometimes merely a passing nervousness.

Should the physical examination show definite organic disease, *do not assume at once that any, or all, of the symptoms complained of are necessarily due to the organic disease present.* If a patient knows or suspects that there is something physically wrong, the doubt and fear engendered will often provoke emotional reactions in the shape of bodily symptoms. Thus a rapid heart or precordial pain is often the patient's emotional response to an innocent systolic murmur or to a mitral stenosis, requiring over long years no special treatment.

Not the disease alone, which we recognize is important, but the patient's reaction to that disease. It is *often much more important to know what sort of patient has a disease* than *what sort of disease the patient has.* The disappearance of symptoms associated with, but not due to, organic disease under Christian Science or at the hands of osteopaths or chiropractors, illustrates the same point. And in passing, be it hinted many of the cures of surgery depend on the same overlooked mental factor. It is so often not the disease but the patient's absurd notions about that disease, which determine the symptoms complained of. In distinguishing how much is due to organic disease, how much to an accompanying nervous element, no rules are provided for our guidance—the *practitioner's judgment after a general survey must decide* for the individual case and prolonged observation may be necessary to correct the original impression.

In other cases, neither the history nor the careful physical examination may show any definite indication of organic disease; this is a common enough situation for general practitioner and internist alike. Here we have to *decide whether special examinations are necessary*—x-ray, blood count, cardiogram, basal metabolic rate, Wasserman test, blood urea or special blood determination as of blood calcium, etc. In these days of economic stress, particularly, *unnecessary expensive examinations must be avoided.* A careful

history and a careful physical examination, including a size-up of the "man above the eyebrows," often make us reasonably certain that there is no organic disease. The *general practitioner has the great advantage of knowing his patients*: the hereditary influences, the home upbringing, the domestic happiness, the business worries, unemployment and thwarted ambition, habits in regard to exercise, alcohol, tobacco and sex—all the factors influencing the well bearing of the patient are often open to the family doctor if he but care to study the human comedy or tragedy enacted in the home with sympathetic insight. We all recognize that anger or sudden disappointment may temporarily increase the heart rate, may cause nausea and loss of appetite —but we *forget that fears and worries—the baffling situations in which so many find themselves in these days of economic stress and unemployment—may chronically stimulate the autonomic system and give rise to dyspeptic, circulatory or nervous symptoms.* We are too apt to assume that local symptoms must have purely local causes.

I come now to the *use and abuse of special examinations.* Only *after we have studied our patient*—his history, his general physical examination, his possible reactions to the problems of life, reactions conditioned by his individual make up—*should we consider special examinations* and order them, if we think it necessary or worthwhile in the full light of our knowledge, acquired by the old established methods.

It is common enough at present *to order an x-ray* of the gastro-intestinal tract, a gall bladder visualization or a cardiogram after *the most perfunctory history* and physical examination and to be guided in our diagnosis by the results of the special examinations. *We exalt our servants into the master's seat.* The *results of our special examinations should be integrated and interpreted in the light* of our *previous knowledge of the patient.* With our personal knowledge, we may not infrequently question the opinion given by x-ray examination or blood report and demand a re-check. We forget *how very human and liable to error are even the best of technicians, the best of specialists*—the apparent certainty of the report imposes unduly. The *physician alone must decide how applicable the changes indicated* in x-ray, metabolic test or cardiogram are to the clinical picture.

It does not help the patient to remove a definitely diseased gall bladder or even gall stones if the dyspepsia for which he consulted the physician is due to coronary thrombosis or to renal insufficiency. Prominent surgeons everywhere have recently emphasised the sources of failure in their results and emphasize as never before that the analysis of symptoms is decisive.

Many errors can be avoided if we study the x-ray findings in the light of the history and physical examination especially if we have indicated our suspicions or actual tentative diagnosis before the x-ray is begun. Such a hint puts the roentgenologist particularly on his guard to avoid missing the suspected lesion.

A few special comments may be permissible:

Not sufficient use is made of the diascope of the chest — tuberculosis, secondary malignancy, bronchial carcinoma, Hodgkin's disease, aneurysm, etc., may be obvious at a glance. *Cardiospasm* may occur at any age and is too often regarded as malignant disease of the osteophagus . . . a mistake usually readily avoidable by a satisfactory x-ray. *Carcinoma of the stomach* is so insidious that we must specially consider it, not only in obstinate dyspepsia but in unaccountable loss of strength and weight or marked anæmia in middle or advanced life. It may be *quite impossible to distinguish between pernicious anaemia and carcinoma of the stomach* apart from a careful x-ray.

At present, *duodenal ulcer* is *not infrequently diagnosed erroneously* by the roentgenologist or on the other hand is missed.

In recently developed constipation at middle age, especially if associated with colic-like pains, *a barium enema should be earlier resorted to than at present,* to exclude carcinoma of the colon, while diverticulitis is forgotten though common enough in stout middle-aged men—the hard, fixed *tumour of diverticulitis* may even at operation be mistaken by the surgeon for carcinoma.

The *x-ray examination of the gall bladder,* following dye taken the previous evening, is wonderfully accurate, if a satisfactory technic be followed, though, even so, some 10% of patients with a normal gall bladder shadow have either definite cholecystitis or gall stones. In doubtful cases a repetition of the test is advisable.

But it is all too often forgotten that definite disease of the gall bladder eventually occurs in 40% of the adult population, half of these having gall stones. It is the duty of the physician to decide, by a careful review of the history, whether in the individual case, the undoubted biliary pathology is responsible for the symptoms complained of. It is a poor consolation for the patient, whose original symptoms were due possibly to angina pectoris, to surgical disease of the right kidney or to spastic colon, to be assured that the gall bladder removed was really diseased.

Especially carefully must the physician decide whether the patient be suffering from angina pectoris or coronary occlusion or from gall bladder disease—or possibly from both conditions. Again be it emphasized that even obstinate gassy dyspepsia plus a functionless gall bladder but without a history of biliary colic, is relieved only in 50% of cases by cholecystectomy.

Whenever possible, the physician should make a point of seeing the x-rays of his patient and should discuss with the roentgenologist any difficulties in reconciling the x-ray findings with the clinical picture. The physician does well to take a general survey of the films; frequently

enough, unexpected abnormalities (e.g. of the bones) may give a clue to a hitherto obscure diagnosis.

Basal Metabolic Tests: The value of a basal metabolic reading under proper conditions is undoubted; the value of a metabolic reading obtained down town in actual practice is limited, while the readings in the hospital are definitely much more reliable. This means much more care will have to be given to the performance of these tests in future; at present, the basal metabolic tests give frequently results at variance with the clinical picture revealed by a careful history and physical examination. But a test which is accepted only when it fits in with the clinical picture and is ignored when it does not, is not very satisfactory and this is roughly the present status of metabolic tests, performed down town, in my judgment. I rely on these tests, so performed, very little, though a repetition of the test heightens its value—low rates are, of course, more reliable than high rates.

Blood Examinations: The younger generation should train themselves to do blood counts systematically. A reliable leucocyte count is so very frequenty of value that it is well worth while for the general practitioner early in his career to practice assiduously blood counts. The extraordinary success of the treatment of pernicious anaemia and the hardly less dramatic improvement in our treatment of microcytic anaemia nowadays make an early and exact diagnosis imperative. Pernicious anaemia, especially, is not taken into account as it might be.

A Blood Urea Estimation is one of the tests which must be remembered. Thrice since I undertook this paper, a high blood urea cleared up the diagnosis of a case, till then obscure.

A Test Meal: A test meal in all cases of obstinate dyspepsia should be resorted to; the general practitioner forgets that from the study of gastric contents recovered—whether well or poorly digested, whether much mucus is present or not, whether blue litmus is changed or Congo paper turned blue—he can get most of the information he needs in the average case without any chemical tests. This does not imply that the presence of pus microscopically or of blood chemically or that the exact amount of free hydrochloric acid present is not valuable; this additional information may be of great service but in the average case, the simple inspection with the use of blue litmus and Congo paper is so frequently sufficient.

Fundus examination: The electric ophthalmoscope is so easy to manipulate that there is little excuse for the younger practitioners at least, not to be reasonably adept in its use. Every case of obstinate headache should be examined for possible optic neuritis or choked disc, yet even now this precaution is all too often overlooked. The condition of the arteries in Essential Hypertension, the changes in the fundus in chronic renal disease and in blood dyscrasias may give an early hint of the diagnosis. The striking pallor of the outer halves of the discs with associated narrowing of the arteries may indicate Disseminated Sclerosis—a condition too often mistaken for functional nervous disease, in spite, too, of the tell-tale extensor response, generally present.

In all obscure disease, *Syphilis* should be considered and a *Blood Wassermann* Test should be obtained. There is no doubt this test is too frequently forgotten.

The *Electrocardiogram* is sometimes essential to make an exact diagnosis, especially of coronary thrombosis v. an abdominal catastrophe, or of a doubtful arrhythmia; it is valuable too, when the diagnosis of angina pectoris is in doubt or when obscure cardiac symptoms develop in middle-aged and elderly people; in well-to-do older patients, it is well worth while having a cardiogram in every case. But its value in diagnosis and especially in prognosis has been much exaggerated in certain quarters; the cardiogram is only one of many factors which have to be considered; the general sizing up of the patient, the careful history, the development of symptoms and the ordinary physical examination will, in most cardiac cases, supply the general practitioner with all the information in regard to prognosis and treatment he requires. For Life Insurance Companies, who cannot rely on obtaining a frank and honest personal history in many cases and who are naturally interested in determining prognosis of large numbers rather than of an individual patient, the Cardiogram has legitimately a wider field of usefulness. So that while the younger practitioner should familiarize himself with Cardiographic findings, which are only exceptionally difficult to interpret, he should remember that the general diagnosis and prognosis of myocardial disease still rest with him and the ordinary methods of examination.

In all chronic cases where the diagnosis is in doubt and in acute disease with developing symptoms, one should deliberately *analyze the case afresh from time to time,* trying to view the history and renewed physical examination with unprejudiced eyes. It is difficult, in attendance on a patient, to divest oneself of leanings to some diagnosis, made in the early stages, even when the later symptoms point unmistakeably to another and obvious solution of the medical problem. Every consultant will bear witness to the truth of this statement.

Lastly, I can but mention the importance of *attendance on operations and post mortems* of patients in whom we are interested, or when this is not possible, of ascertaining accurately the operative or post mortem findings and reviewing the whole case in the light of such authoritative information.

In reference to the News Items published in the July issue of the Review, entitled "My Method in Puerperal Infection," this paper was not written by any member of the Department of Health and Public Welfare, but was taken verbatim from one of the many publications coming into the Department, so it should not be taken to represent the considered opinion of members of the Department in reference to the proper method of treating puerperal infection. —F.W.J.

The Canada Year Book

The publication of the 1936 edition of the Canada Year Book is announced by the General Statistics Branch of the Dominion Bureau of Statistics. The Canada Year Book is the official statistical annual of the country and contains a thoroughly up-to-date account of the natural resources of the Dominion and their development, the history of the country, its institutions, its demography, the different branches of production, trade, transportation, finance, education, etc.—in brief, a comprehensive study within the limits of a single volume of the social and economic condition of the Dominion. This new edition has been thoroughly revised throughout and includes in all its chapters the latest information available up to the date of going to press.

The 1936 Canada Year Book extends to over 1,150 pages, dealing with every phase of the national life and more especially with those susceptible of statistical measurement. Attention may be called to some of the special features of the present volume. The statistical summary, included in the introductory matter, has been extended this year. A special article, "Canada on Vimy Ridge," prepared by Colonel A. Fortescue Duguid, D.S.O., B.Sc., R.C.A., Director of the Historical Section (G.S.), Department of National Defence, has been included in Chapter II. New material on fertility rates and multiple births in Canada has been added to Chapter V. The introduction to the External Trade Chapter (XVI) has been revised by the inclusion of an abstract of the value and quantum of world trade abridged from the League of Nations' "Review of World Trade, 1934." There is included new material on the important subject of municipal taxation and the estimate of national wealth, 1933, with revised comparable figures for 1929—the latter estimate gives a picture at the peak of domestic prosperity while the 1933 figures reflect the writing down of values resulting from the depression. Improvement has been affected in the presentation of the financial statistics of the provincially-controlled schools of Canada by the collection of data on a more comparable basis from all provinces. Sections dealing with the public health activities of Dominion and of provincial health authorities and a brief sketch of the origin and growth of the different classes of institutions in Canada have been included.

The death of His Majesty King George V. on January 20, 1936, received with deep sorrow throughout the Empire and with world-wide regret, and the succession of King Edward VIII. to the Throne, have been appropriately marked by the reproduction, as frontispiece, of the official Proclamation of the Government of Canada made on January 21, 1936, accompanied by the latest official photographs, obtained through the courtesy of the respective Court photographers.

The Volume is illustrated by many maps and diagrams and the latest available data are everywhere included.

Owing to the urgent need for economy in the distribution of Government publications, it has become necessary to make a charge to all individuals receiving the Canada Year Book. Persons requiring the Year Book may obtain it from the King's Printer, Ottawa, as long as the supply lasts, at the price of $1.50, which covers merely the cost of paper, printing and binding. By a special concession, ministers of religion, bona-fide students and school teachers may obtain paper-bound copies at the nominal price of 50c each.

Special Articles and Association Notes

The Manitoba Medical Association Review

Formerly the Bulletin of the Manitoba Medical Association

ESTABLISHED 1921

WINNIPEG, AUGUST, 1936

Published Monthly by the
MANITOBA MEDICAL ASSOCIATION
Editorial Office
101 MEDICAL ARTS BUILDING, WINNIPEG

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Annual Subscription - $2.00

Editorial or other opinion expressed in this Review is not necessarily sanctioned by the Manitoba Medical Association.

Executive Meeting

Minutes of a Meeting of the Executive of the Manitoba Medical Association held in the Medical Arts Club Rooms on Thursday, July 9th, 1936, at 12.30 p.m.

Present.

Dr. F. G. McGuinness
Dr. A. S. Kobrinsky
Dr. W. E. R. Coad
Dr. F. A. Benner
Dr. E. S. Moorhead
Dr. O. C. Trainor
Dr. S. G. Herbert
Dr. F. W. Jackson
Dr. W. Harvey Smith, by invitation.

This meeting was called for the purpose of considering a communication received from the Workmen's Compensation Boaard re. appointments to the Special Committee of the Board. Names were suggested.

Moved by Dr. S. G. Herbert, seconded by Dr. F. A. Benner: That these names form the basis of the names submitted, but that the President and the Secretary view the list of members and pick out any more that have not been thought of. —Carried.

Re. C.M.A. Executive Meeting at Victoria.

Dr. Moorhead gave a report on the meeting of the Executive of the C.M.A. at Victoria and spoke at considerable length on the question of federation. He stated it had been decided by the Executive that each Province appoint a committee to consider Federation and that one member of the committee should be the Provincial representative on the Committee on Federation of the C.M.A., so that each Provincial Committee's deliberations would be taken to the next Executive meeting of the C.M.A.

Dr. Moorhead also spoke on the survey of medical services amongst the unemployed in Winnipeg and asked that certain accounts which had been contracted in the rent of a calculator, engaging a stenographer and reprints, be paid.

It was moved by Dr. O. C. Trainor, seconded by Dr. A. S. Kobrinsky: That these accounts be paid. —Carried.

Re. Accounts for Travelling Expenses.

The secretary brought forward an account for travelling expenses for two speakers at one of the district society meetings. After considerable discussion the secretary was instructed to revise the account and pass it for payment. He was also instructed to pay account submitted by Dr. Geo. Clingan.

Re. Voluntary Health Insurance.

Dr. W. Harvey Smith was present by request and submitted a report on a proposed trial of voluntary health insurance as follows:

Gentlemen:—

For many years, as you are aware, I have been concerned with the economic future of medicine, as I have felt that fundamental changes in the basis upon which medical services would be supplied to the public were in process of evolution, and that if organized medicine continued to adopt a laissez faire towards the currents of thought, and the attitude of legislatures and peoples on the economic relationship of our profession towards the public, we would of a certainty find that the control of our own destiny had passed to other hands, with results that might debase the practicing physician to the level of an employee of a beaurocratic system, with all that such a status involved in lack of independence and of earning power. That I may be included properly among the minor prophets, I would question, yet there is every satisfaction to be derived by an individual, be he never so humble, by being able to say, "I told you so." I need not stress the progress that has been made in the development of systems of socialized medicine throughout the world, and especially in our own country, since I essayed the role of a prophet six years ago. We have gone far in Canada, especially in the three provinces west of Manitoba, in the development of plans for supplying medical services to the public under the auspices of the state.

That such services may be operated to the advantage of the public and even of our profession has been demonstrated in many countries, and more recently in Winnipeg, but there is always the danger that the medical profession may be exploited in the interests of politics, and find its destinies controlled by political parasites, rather than by competent and independent administrators. In the United States, the profession is unalterably opposed to any system of state medicine, and a somewhat similar situation prevails in Canada.

In the States, efforts have been made to devise a plan under which the medical profession might offer its services to people below a certain income level, upon whom the burden of paying for medical care and associated services often becomes unsupportable. It is to bring before you a plan that superficially has at least been found to work effectively in the state of Washington, that I have asked permission to address your executive today.

First of all may I say that I consider it imperative that the medical profession must plan for the fulfilment of its own economic destiny, enunciate the principles under which it shall offer its services and maintain control of whatever agencies it may set into

operation for providing medical care for the people whom it aims to serve. Certain fundamentals must be maintained. These include the right of choice, and the setting up of competent administrative and judicial tribunals for conducting such services as may be offered to the public.

When in Victoria recently, in association with Dr. Moorhead, I had an interview with the manager of the Washington State Medical Bureau, which operates a system of providing medical care to persons under an income level of $1,800.00 a year, which was organized under the auspices of the profession of that state and is administered under their direction.

The principles under which this plan is operated duplicate in part those which on several occasions I have urged might with advantage be adopted in connection with the Medical Arts Building, as the administrative centre, and were adapted to the needs of the so-called "white collar" class, upon whom the financial burden of paying for medical care falls most heavily, especially when the members are the victims of major illness.

Dr. Moorhead and I felt that your excutive should be familiar with this plan, which—so it is claimed by its promoters—will do away with the spectre of state medicine, and afford a very deserving class of people medical service under a system that recognizes the value of the insurance principle of spreading the risk, and promises to maintain the cost of meeting the economic demands of illness upon a level that the average person can meet. It is suggested that a careful study should be made of the Washington State plan, in order that the members of the Manitoba Medical Association may be familiar with its details, and if thought desirable give it their support, and possibly sanction its establishment upon an experimental basis in the province.

A few of the facts are as follows: 60,000 people are looked after by 400 doctors in the State of Washington.

The centre of administration is in the City of Seattle.

The direction of the system is absolutely in the hands of the medical profession.

Those accepted as beneficiaries of the system do not include the victims of infectious disorders, cancer, T.B., nor is an obstetrical service offered.

Clients are obtained through canvassers, who are paid one month's premium for every insuree obtained.

Doctors are paid $1.80 for office calls, and $12.00 for tonsillectomies. A detailed scale of charges was not available but will be supplied later.

The cost of administration is about 8%

The results so far obtained appear to be satisfactory to the doctors and patients concerned, and a great deal of valuable statistical information is being obtained. The basis of operation is experimental rather than actuarial.

A large proportion of the physical disorders that afflict those insured under the Washington plan can be treated inexpensively and satisfactorily.

The system tends to eliminate the charlatan and the quack in connection with the treatment of persons of limited means.

The manager states that the doctors participating are being paid at this time about 80% of their accounts. He has expressed a willingness to come to Winnipeg and tell us about the system.

The fees paid are somewhat better than those sanctioned by the Compensation Board of the State.

Several doctors from the State of Washington whom I interviewed spoke in terms of the highest praise of the accomplishments of the medical bureau which is conducting this enterprise.

In conclusion let me say that I consider this plan to possess features that are well worthy of investigation, with the idea of adopting it in Winnipeg. It might serve to minimize the demand for health insurance under government control. Indeed were it to be introduced in Winnipeg and efficiently conducted, our government might welcome such a development, as removing a problem from their hands that has proved a source of discord and difficulty in many of our provinces.

(The present rate charged for medical services, etc., under this plan is $1.50 per person per month).

After considerable discussion it was moved by Dr. F. A. Benner, seconded by Dr. S. G. Herbert: That this matter be turned over to the Committee on Sociology for their consideration. —Carried.

There being no further business to come before the Executive, the meeting adjourned.

The Value of Employing Consent Forms for Operations

From "The Canadian Hospital"

The practice of using consent forms, or permits, for operations in our hospitals is generally recognized as being in the best interests of the doctor and the hospital, as well as the patients. When a doctor operates it is not sufficient that he comply with the dictates of good surgery, act reasonably and benefit the patient; the law takes the attitude that except in unusual cases, the patient is the one who has the right to decide what should be done with his body and the surgeon runs a good deal of risk in performing an unauthorized operation. Recently, in order to obtain an idea of the prevailing arrangements in the larger Canadian institutions, the Department of Hospital Service of the Canadian Medical Association sent out a questionnaire to some 20 representative public hospitals in Canada.

From this study it would appear that consent forms of permit for operation are of practical value to the hospital and to the surgeon, and a decided safeguard. They are taken in most cases, and as a rule are signed at the admission office. When the patient has already been "Admitted" the consent is signed at the request of the head nurse or intern by the patient, if possible, or by the husband, father, mother or next of kin. Some hospitals attach the responsibility for explaining the kind of operation, its danger and expected result, to the operating surgeon and expect him to get the "consent" form signed.

In the case of a married woman the form is signed by the husband, and minors must be signed for by parents or guardians. In the case of sterilization, a large western hospital protects itself by the use of a rather elaborate legal form (Figure 1) which the husband must sign, relieving the doctor and the hospital of responsibility.

Hospitals which do not as a general rule require a written permit for an operation on any adult patient, either private or public, do insist on the signature of parent or guardian for an operation on public patients who are minors.

Hospitals have had to face the problem of children sent to hospital from Out-Door Clinics for Tonsillectomy, Circumcision, and so forth, and now insist that the Out-Door Department secure written consent of parents for operation giving the surgeon discretionary powers to do anything further that he deems essential.

Of course, in the case of a sudden and critical emergency, where the health or life of the patient may be endangered due to a delay in obtaining "consent" a surgeon would be justified in performing a major operation without even an implied consent. This applies to a person who is rendered unconscious either by injuries received in an accident, or otherwise, and requires immediate surgical treatment. The surgeon would be justified in applying such medical and surgical treatment as might reasonably be necessary for the preservation of his life or limb. It also covers the case where a consent to a certain operation has been given and in the operation, serious conditions not before anticipated are discovered, endangering the life or health of the patient. Then the surgeon is justified in extending the operation to remove and overcome such conditions. There must, however, be an immediate danger to life or health and no reasonable opportunity of obtaining the consent to the operation.

In a recent Alberta case a surgeon was called upon to treat a patient who had been injured in a motor car accident. The patient asked the surgeon to fix up his hand but not to cut it off. Later on in the operating room the patient repeated his request and the doctor repeated that he would be goverened by the conditions found when the anaesthetic had been administered. The patient said nothing. On examination the doctor found that an amputation was necessary.

On litigation developing, the court refused the physician the amount of his bill and awarded the patient $50.00 damages, the small amount being due to the fact that the loss of the arm was inevitable.

In cases of this sort, it is generally considered that the hospital is not responsible for such operations, but is an independent actor, and the nurses assisting in such cases cease to be the servants of the hospital, because they are under the sole orders of the operation surgeon until the operation has been completely finished.

When replying to our questionnaire, one of our western hospitals, which enjoys the distinction of having a young lawyer as a full-time member of the hospital staff, with office in the business section of the hospital, prepared the following practical rules covering permits for operations:

1. A written consent should be obtained. A verbal consent is legally sufficient but is dangerous because its exact terms are open to discussion.

2. The consent should describe the main operation and include any suspected complications and generally describe the scope of the operation as fully as possible.

3. The consent might be drawn so as to include other unconnected operations which may prove necessary upon incision and which can be done at the same time. This clause should not be too wide in its scope and the power so given should be exercised with great discretion. The situation will be disastrous if patients receive the impression that the form is used to place the patient entirely at the mercy of the surgeon.

4. The consent should contain a statement that the possible results of the operation have been explained to the patient.

5. In the case of a married woman or of an infant the consent should, if possible, be signed by the husband or father. The father's consent will be essential in all cases of young children.

6. The consent should include the hospital.

7. The consent should repeat only what the patient has already consented to in his conversations with the surgeon. It must be remembered that the written consent is only a written record of what has been said. If the patient will not consent to the amputation of a finger, the amputation should not be included in the written consent.

8. Where a surgeon performs an operation without any consent or extends an operation past the scope of an existing consent, he must be prepared to prove, firstly, a sudden and critical emergency, and secondly, that there was no reasonable opportunity of securing a further consent and he must be prepared to prove this before a judicial tribunal in the face of criticism and cross-examination from an adverse cousel, and possibly in the face of adverse opinions from members of his own profession and certainly after the exact results are known and everyone concerned has had a much greater opportunity than he had at the time and after they have had an opportunity of being wise after the event.

9. Where a patient imposes a restiction on the scope of the operation, the doctor must decide whether to withdraw from the operation, to proceed with the operation subject to the limits imposed by the patient or to proceed with the operation, ignore the limits and face a possible claim for damages to which as the Mulloy and Rolater cases show, there is no defence.

Typical forms of consent in use in various hospitals are reproduced herewith:

Permit for Surgical Operation

Patient .....

Date .....

Surgeon .....

Operation .....

.....

Each of the undersigned hereby consents to the above-named surgeon performing upon the said patient the above-mentioned operation; and treating, or operating, for any complicating factors that may arise or be discovered in the course thereof; and performing any further or other operation which may, in his opinion, be necessary; and consents to each of his associates, the..... Hospital (owned and managed by.....), the members of its Attending Surgical and Medical Staff, the members of its Intern Staff and its nurses, employees, and servants, assisting the said surgeon in such operations and treatment; and acknowledges that the nature and possible effects and results of such operation has been explained to each of us.

Witness.....
Patient.....
Witness.....

.....

Husband; Wife; Parent; Guardian.

Notes: Wherever possible, obtain:

1. The consent of the husband to an operation on his wife, even if she is over twenty-one years of age.
2. In the case of a child under twenty-one years of age, the consent of the father, if living, otherwise the consent of the mother, if living, or if neither is living, the consent of the guardian.

I, the undersigned, do hereby give my consent to having an operation performed on..... a patient in Ward.....who is under age.

Witness.....
Parent or Guardian.....
Date.....
Address.....

I hereby apply for the admission of.....

.....

whom I authorize you to place under the care of Doctor .....

and in consideration of such admission, I hereby grant permission for such examination or operation, as may be deemed advisable by the physician or surgeon in charge of the case, and further, I hereby agree to allow the above patient to remain in the Hospital until discharged by the Hospital authorities, or until production of a medical certificate certifying fitness for discharge.

Signed.....
Relationship.....
Signed.....
Relationship.....
Witness.....

In the Matter of.....

.....

I, ...
of ..... in the Province of .....,
make oath and say as follows:—

(1) THAT I interviewed .....
at ..... to-day with regard to her written request of ..... (date) for sterilization;

(2) THAT I explained to her that sterilization would not affect her health adversely, but would mean that in the future, regardless of whether she married or not, she would bear no children;

(3) THAT the said .....
stated that she understood what sterilization meant and that it was her wish to go to the ..... Hospital forthwith to have the necessary operation performed.

SWORN before me at the
....., in the
Province of .....
this ..... day of ..... A.D., 193....

.....
A Commissioner in B. R., etc.

Medical Library University of Manitoba

"The Practitioner"—May, 1936.

This number contains a symposium on Diseases of the Skin in which are the following articles:

"The Principles of Diagnosis in Skin Disease,"—by Henry MacCormac, C.B.E., M.D., F.R.C.P., Middlesex Hospital.

"General Principles of Treatment of Some Common Skin Diseases,"—by J. E. M. Wigley, M.B., M.R.C.P., London School of Dermatology.

"Eczema and Its Treatment,"—by A. C. Roxburgh, M.A., M.D., F.R.C.P., St. Bartholomew's Hospital.

"The Treatment of Acne,"—by Sir Ernest Graham-Little, M.D., F.R.C.P., M.P., St. Mary's Hospital.

"Barber's Rash,"—by H. Haldin-Davis, M.D., F.R.C.P., F.R.C.S., Royal Free Hospital.

"Psoriasis and Its Treatment,"—by John Alexander Drake, M.D., F.R.C.P., D.P.H., King's College Hospital.

"Pediculosis,"—by John T. Ingram, M.D., M.R.C.P., General Infirmary, Leeds.

"Bullous Eruptions,"—by J. Goodwin Tomkinson, M.D., Western Infirmary, Glasgow.

"The Practitioner"—June, 1936.

This number contains a symposium on Arterial Disease, included in which are the following articles:

"The Treatment of Patients with Abnormal Blood Pressure,"—by John Hay, M.D., F.R.C.P., Royal Infirmary, Liverpool.

"Arteriosclerosis: General Considerations,"—by Geoffrey Evans, M.D., F.R.C.P., St. Bartholomew's Hospital.

"The Abdominal Manifestations of Arterial Disease," — by C. E. Lakin, M.D., F.R.C.P., F.R.C.S., Middlesex Hospital.

"The Cerebral Manifestations of Arterial Disease,"—by Douglas McAlpine, M.D., F.R.C.P., Middlesex Hospital.

"The Surgical Aspects of Arterial Disease,"—by W. H. C. Romanis, M.A., M.Ch., F.R.C.S., St. Thomas' Hospital.

"The Estimation of Blood Pressure and Its Relation to Life Assurance,"—by Reginald Hilton, M.A., M.D., F.R.C.P., St. Thomas' Hospital.

"The Investigation of Diseases of the Salivary Glands,"—by Reginald T. Payne, M.D., M.S., F.R.C.S., St. Bartholomew's Hospital.

"Interlobar Empyema,"—by Walter Broadbent, M.A., M.D., F.R.C.P., Brighton.

"Spinal Anaesthesia in Peptic Perforations,"—by J. W. Riddoch, M.C., M.B., Ch.B., F.R.C.S., Birmingham.

"The Physical Effects of Conception Control,"—by Frederick J. McCann, M.D., C.M., M.R.C.P., F.R.C.S., F.C.O.G., London.

"Contraception in General Practice,"—by Edward F. Griffith, M.R.C.S., M.R.C.P., Aldershot.

Department of Health and Public Welfare

NEWS ITEMS

The following is Sir George Newman's inaugural address given at Cardiff, Wales, and has been taken from the May issue of "Preventive Medicine," which is published by the New York Academy of Medicine.

"THE NEW PURPOSE OF MEDICINE"

by

SIR GEORGE NEWMAN, G.B.E., K.C.B., M.D.,
Late Chief Medical Officer, Ministry of Health

The science of medicine as we think of it today has emerged slowly, since the dawn of human history, out of a vast and complex medley of human experience, social as well as medical. We, the practitioners of the healing art in one branch or another in the twentieth century, are the indirect descendants of magicians, astrologers, witch-doctors, and priests, and our formulated doctrines derive from primitive folk-medicine and its plant-lore, and from the superstitions, charms, and spells of the ancient world five thousand years before Christ. But we no longer seek guidance from the stars and comets; we do not believe that disease comes by caprice or is caused by evil spirits or angry deities; and we belong to a profession which have transmuted the herbalism, bone-setting, and rude surgery of former ages into a growing and ordered science and art. It is true that all through the centuries its emergence has been permeated, as now, by human fallibility, ignorance, and error, but the history of its advance is, with all its faults, the history of the discovery or application of certain fundamental principles leading to a fuller understanding of the nature of man, of disease and its causation, and of the ways and means by which disease can be controlled and man's survival on the earth made a little less insecure and more purposive. This has been accomplished by the arduous labours of a long line of diligent workers devoted to the search for truth and a way of life. Their journey has never been continuous and not always progressive; sometimes it has been isolated and individual, at other times it has been co-operative, winning the assent of the commonalty of men.

Let me at once commend to all students and practitioners of medicine the essential and invaluable study of this fascinating story of what Osler called "man's redemption of man," one of the greatest stories in the history of mankind, a story of high endeavor of man's mind to find out the secrets of nature and the means of their fuller discovery, interpretation, and use. The history of a science, according to Prof. Sudhoff, is the science, and without regard to history there can be nothing but confusion, misapprehension, and wasted effort in our undertakings.

When we recall the medical practitioner of the ancient world or of the Middle Ages, or even of the Renaissance of the fifteenth century, and contrast him and his profession with the practitioner of our own time, we shall be arrested by the reflection that we are living in a period in the history of man which is characterised by a profound change in the purpose of medicine amounting almost to a revolution. It is becoming more communal and preventive. Not only has there been an enormous advance in knowledge in all branches of medical science, greater in the last hundred years, let us remember, than in all the centuries which preceded them, but two other modern changes have altered the application of such knowledge. The State has also availed itself of such knowledge in the interest of the whole people; and the education of the people themselves has enabled them to appreciate the advantages of such knowledge. It is these three factors which have given the student of this generation a wholly new orientation.

THE MEDICAL CHANGES OF A CENTURY

When, at the end of the fifteenth century, Linacre returned from his sojourn in Italy he was inspired with the idea of reviving English medicine with the Hippocratic learning of the Greeks; he began with the translation of the Greek masterpieces as represented in the writings of Galen; then he established Lectureships in Medicine at Oxford (Merton) and Cambridge (St. John's); lastly, he persuaded Henry VIII. in 1518 to found the Royal College of Physicians in London to introduce Greek Medicine and to regulate the practice of English Medicine. Subsequently the College issued the first official pharmacopœia for the authorization and scrutiny of drugs used in medical practice. A century later, in 1616, Harvey announced to the College his discovery of the circulation of the blood which began modern physiology; Thomas Sydenham (sometimes called the Father of English medicine) introduced Hippocratic principles into his practice in London; lastly, there was the wonderful contribution of the medical practitioners of the eighteenth century. They studied and explored the circumstances of epidemic disease, introduced medical notification, advocated personal hygiene, initiated industrial welfare, reformed midwifery and the care of childhood, established dispensaries, hospitals, and medical schools, and gave to the world both John Hunter and Edward Jenner.

The growth of medical science itself since 1835 is scarcely less impressive than the social and communal impulses which we have noted. There was the introduction of anæsthesia, the "death of pain" as it was called, followed by antiseptic surgery, the defeat of sepsis, hailed as two of the great discoveries of mankind. From 1845 to 1860 came the new knowledge from the labours of Helmholtz, Virchow, Claude Bernard, and Darwin. In that same period there were begun three series of investigations which have carried us whole leagues forward; Claude Bernard proclaimed the constancy of the internal environment of the body maintained by its circulating fluids, Du Bois Reymond opening up the problem of nervous regulation, and Addison that of endocrinology, and the three problems have been advanced and in part resolved in our own generation. There was the rise and rapid advance of bacteriology which opened the door to the work of Pasteur and Koch and their disciples, and in the last twenty years of the nineteenth century the discovery was announced of the bacillary cause of typhoid fever, septicæmia, tuberculosis, glanders, pneumonia, cholera, diphtheria, tetanus, meningitis, plague, and dysentery, and a little later came the spirochæte of syphilis. In 1895 came the unveiling of the body by the X ray; in 1898 Manson and Ross discovered the cause and vehicle of malaria; in 1900 the Curies isolated radium; and in the last thirty years we have seen that man himself is no longer the microcosm but the cell of which he is built is the unit. The cell, its content, its function, and its secretion, has become so vitally important that by its smallest deviation man's body may be profoundly changed, or even destroyed, by its own household. The advance of bacteriology has not only revealed the ætiology and viruses of infective processes but has opened the doors of immunology far wider than did Edward Jenner, providing us not only with vaccines and serums, but with diagnostic means of clinically estimating immunity. Physiologists and biochemists have eluciated the existence and character of the hormones in the body, finding their amazing power of control of the body to be second only to that of nervous regulation; and in the world of nature have similarly been disclosed the vitamins;

and as a result, we are now furnished with chemical and biological means of treatment and prevention. In 1909 Ehrlich gave us salvarsan as the chemical answer to syphilis, and in 1922 Banting furnished insulin as the biological answer to diabetes, and to these must be added medication by thyroid, adrenaline, pituitrin, liver extract, etc. We have in three generations seen almost a new body unveiled for man, and have begun to learn how to control his life. We are living witnesses of what Sir Clifford Allbutt called "a new birth of medicine."

What does all this mean for us?

It means that in our day the science and art of medicine has arrived at a new position of immeasurable gain and advantage as compared with the past. We can now become, if we will, fuller interpreters of Nature, the heralds and agents of powers of control of the body undreamed of by our forefathers. In a word, the new purpose of medicine is the prevention of disease in the individual and the community, and the raising of the whole standard of physical life and human capacity.

Let me submit for your consideration three reflections.

THE MAINTENANCE OF HEALTH

First, the art of medicine must direct its energy and knowledge to the maintenance of health. One of the recent changes that has come over the teaching of medicine is the necessity of studying anatomy, physiology, and even biochemistry in the normal living body, for the cadaver cannot be a vital index. We know that disease is a disharmony of the living body, its discomfort and dis-ease, its reaction to the constant internal environment of Claude Bernard and to the variable external environmet which surrounds us—soil, air, water, climate, occupation, habits, and the agents of infection. One of the great lessons of the Greeks was that the body itself could often harmonise its disharmony, provided it could function normally. Now the normal body requires two natural conditions for its survival, functioning, and health—viz.: nutriment in the form of oxygen and nutritious food, and effectual exercise of all its parts and faculties. From the earliest times, however, the custom and education of the medical man has concentrated on morbidity, and this was reasonable as disease is the enemy of health. But it is not the only enemy, not the only criterion or agency of disharmony. There may be physiological disharmony.

My submission is that doctors should enlarge the narrow purpose of directing their almost exclusive attention to morbid conditions and the remedy of such conditions mainly by means of drugs. Unfortunately this tendency in professional custom has misled public opinion, and the patient himself becomes accustomed to think in terms of disease and of drugs. Hence, there has risen a pernicious and false reliance on the "bottle of medicine." Drugs are sometimes necessary and a pharmacopœia is required. But medication by drugs is, like patriotism, not enough (or easily too much), and we must not lose our way in this direction, or surrender our common sense and neglect our new knowledge and better methods. If I may say so, the wide-spreading fetish of quackery in its manifold forms may be partly due to the unconscious misdirection of doctors themselves. People are beginning to feel that they need something more than the doctors are giving them and therefore look elsewhere.

Thus a reaction is setting in. On all sides the community is begging for instruction and guidance from the medical profession as to health, something much larger than the negation of disease. On scientific grounds we know the common sense of this demand, and we should do wisely to meet it more fully. We know it is sound, because health of body means increase of capacity, physical and mental, for work and for the enjoyment of life; it means a stronger and better population, now and in the future; it means increased power to resist or overcome disease; and it means the prolongation of life and the postponement of death.

I should like to see two things happen. First, that in every medical school there should be definite and skilled instruction in the applied physiology of the nutrition of the body (including dietetics), of ways and means of the effective oxygenation of the body, of assessment of fitness, physique, and capacity, and of all forms of physical education. This would encourage both the doctors and their patients in the new orientation of medicine. In some medical schools this is already undertaken, but it should be universal, and taken in hand by a clinical physiologist. Secondly, that every medical practitioner should actually include the practice of this form of clinical medicine. Mark this fact, every patient needs health guidance. Directly or by implication every patient, coming for the first time to his doctor, asks these four questions: "What is the matter with me; can you cure it; how long shall I have it; how can I avoid getting it again?" Here is diagnosis, treatment, prognosis, prevention. Each of these questions is of importance to the patient, but I invite you to consider the vast realm of medicine, and of invaluable service to the patient, which opens before you in providing a correct answer to the fourth question. In passing, you will observe that the patient, following his primitive ancestors, thinks of his malady as "it," something separate from himself an entity, an unlucky acquisition. But as we all know his malady is himself, a personal disharmony of his total ego. Disease is rarely singular, and perhaps never an entity. It is the man himself, his heredity, temperament, habits, way of life, perhaps even his religion, that is your patient.

Does the average busy practitioner actually advise upon or prescribe for the patient's way of life, his ineffectual use of diet (food and drink), fresh air, exercise, and rest? Has the doctor carefully considered the physiological effect of these five factors on his patient, on his heart, lungs, stomach, kidneys, on his nervous system, or his endocrine glands? Does he really answer the patient's fourth question, or does he evade it? Does not part, or the whole, of the patient's malady lie quite beyond medication by drugs? Is it not expedient that the patient, and indeed the normal person, should be able to obtain sound advice on health from the medical profession? Should not every practitioner be a missionary of health and prevention, a doctor and teacher of his patients in the true sense? It is certain that he could do more good in five minutes with his patient than any other educational agency, formal lectures, textbooks, or Acts of Parliament. In a word, I have been long convinced that medical practitioners ought to be, and often are, the first effective teachers of hygiene to a people, the principal interpreters of preventive medicine in England, for through their hands pass one-third of the whole population every year.

NEED FOR MORE PREVENTIVE MEDICINE

Although the death-rates in this country are exceptionally low, and lower than in most countries of the world, and the national health has steadily improved and stands higher today than at any previous time in our history, and although England has banished leprosy, plague, cholera, epidemic enteritis, endemic scurvy, typhus, and other scourges, and although the nation is spending lavishly on social welfare, there is still great need for further progress in preventive medicine and its research. We have as a nation by no means solved all our health problems, and our industrial and social evolution seems to bring new ones. The physique of children, although improving, leaves much to be desired, and that of youths from 14 to 18 years of age shows some signs of actual deterioration in certain districts; nutrition has steadily improved, but is still very unsatisfactory in some groups of the population; the common cold,

bronchitis, and dyspepsia continue prevalent, costly, and disabling, yet all three are among the most preventable of maladies; influenza, "rheumatism," and cancer remain undefeated, and diseases of the heart and circulation claim 130,000 lives a year (much the highest certified cause of death); maternal mortality remains static at about 1 death in 200 mothers confined and shows as yet no reduction; the dental condition of the people is very much below par and results in unfortunate sequelæ; and too much attendance upon the sick is directed merely to drugs and ineffectual advice rather than to personal hygiene and a sound way of living. It must be added that the burden of incapacitating sickness and accident continues to be unduly heavy, costs the nation annually millions of pounds, and deprives industry of many thousands of years of lost time from work—in 1933, 29 million weeks were thus lost. The great bulk of this current sickness and accident is directly preventable by a sensible, intelligent, and civilized people, but it is not prevented. These are serious facts for the consideration of the profession. We cannot ensure a healthy nation only by "bottles of medicine," modern surgery, and artificial immunization. A fuller and deeper appreciation of positive and constructive health is necessary.

In the light of these facts I venture to hope that the medical profession will steadily continue to close its ranks and work together as one body for the unity of medicine. It has in practice two aspects or wings, curative and preventive, between which there is now no call whatever for any sort or degree of conflict or competition. They are complementary and belong to each other, as the wings of a bird. They need each other, and the community needs both. Moreover, the medical practitioner is the outpost of both. We must use the new knowledge so rapidly extending in order to serve the national health. In doing so, we should remember that the social, æsthetic, psychological, and religious aspects of man's health or wholeness cannot wisely be disregarded. They form an integral part in the formation of those common standards of aspiration, discpline and conduct, so greatly needed by the nation today, and so essential to national health. Among such standards, to be accepted by the public and to be vigorously supported by the medical profession, none seem to me to be more vitally important that the urgent national need for the physical and health education of youth.

COMMUNICABLE DISEASES REPORTED
Urban and Rural - June, 1936.

Occurring in the Municipalities of:

Measles: Total 608—Winnipeg 195, St. Laurent 68, Unorganized 57, Shoal Lake R. 44, Lawrence 37, St. Boniface 10, Portage la Prairie City 9, McCreary 6, Dauphin Town 5, Kildonan Old 5, Selkirk 4, St. Andrews 4, St. Vital 3, Cameron 3, Flin Flon 2, Hamiota Village 2, Norfolk North 2, Siglunes 2, Strathclair 2, St. Clements 2, Brandon 1, Brooklands 1, Fort Garry 1, Hamiota Rural 1, Kildonan East 1, Macdonald 1, Rapid City 1, Shoal Lake Village 1, St. James 1, Late Reported: February, Pembina 1, March, Hanover 1, April, Hanover 1, Rosser 1, May, St. Andrews 31, Unorganized 28, Shoal Lake Rural 26, St. Laurent 18, Flin Flon 14, St. Boniface 7, Siglunes 3, Brooklands 2, Dauphin Town 1, Lawrence 1, Selkirk 1, Springfield 1.

Scarlet Fever: Total 293—Winnipeg 257, Kildonan East 12, St. Vital 8, St. Boniface 5, St. James 3, Brandon 1, Fort Garry 1, Kildonan West 1, Mossey River 1, Oakland 1, Ritchot 1, Rosser 1, Winnipeg Beach 1.

Chickenpox: Total 162—St. Vital 60, Winnipeg 54, St. Boniface 22, Gilbert Plains Rural 7, Gilbert Plains Village 6, Kildonan East 5, St. James 4, Brandon 3, Late Reported: May, Kildonan East 1.

Tuberculosis: Total 87—Winnipeg 13, Unorganized 6, St. James 4, Brandon 3, Brokenhead 3, Dauphin Rural 3, St. Andrews 3, St. Boniface 3, Whitehead 3, Ellice 2, Flin Flon 2, Hanover 2, Rockwood 2, Springfield 2, St. Clements 2, St. Vital 2, Transcona 2, Whitewater 2, Winnipegosis 2, Bifrost 1, Blanchard 1, Brooklands 1, Cornwallis 1, Cypress South 1, Daly 1, Dauphin Town 1, Eriksdale 1, Ethelbert 1, Fort Garry 1, Grey 1, Lac du Bonnet 1, Lorne 1, Norfolk North 1, Rhineland 1, Rivers Town 1, Riverside 1, Roblin Town 1, Roland 1, Selkirk 1, Shell River 1, Sifton 1, Strathclair 1, Ste. Anne 1, Turtle Mountain 1, Westbourne 1.

German Measles: Total 79—Brandon 26, Kildonan East 6, Selkirk 5, St. Boniface 5, Roland 4, Rosser 4, St. Andrews 3, St. James 3, The Pas 3, Rockwood 2, Unorganized 2, Whitehead 1, Late Reported: May, Lawrence 8, The Pas 4, Selkirk, 3.

Mumps: Total 51—Winnipeg 27, Unorganized 7, Ethelbert 2, Hamiota Rural 1, Kildonan East 1, Norfolk North 1, Siglunes 1, St. James 1, The Pas 1, Woodlands 1, Late Reported: May, Kildonan East 8.

Influenza: Total 49—Late Reported: January 6, Coldwell 1, Morris Rural 1, Rosedale 1, Unorganized 1, Whitemouth 1, Woodlands 1, February 6, Brandon 2, Gladstone Town 1, Ritchot 1, Strathcona 1, St. Francois Xavier 1, March 21, Brandon 2, Pipestone 2, St. Andrews 2, Coldwell 1, Cypress South 1, Dauphin Rural 1, Garson Village 1, Gilbert Plains Village 1, Gimli Rural 1, Hamiota Rural 1, Hanover 1, Minnedosa 1, Morris Town 1, Norfolk South 1, St. James 1, Unorganized 3, April 16, Dauphin Rural 3, Bifrost 2, Hanover 2, Archie 1, Brandon 1, Minitonas 1, Norfolk North 1, Rhineland 1, Sifton 1, Ste. Anne 1, Ste. Rose 1, St. Vital 1.

Whooping Cough: Total 19—Winnipeg 12, Ellice 1, Portage la Prairie City 1, Unorganized 1, Late Reported: January, Unorganized 1, March 3, Grandview Rural 1, Unorganized 2.

Diphtheria: Total 11—Winnipeg 8, Whitemouth 1, Franklin 1, Late Reported: May, Langford 1.

Erysipelas: Total 10—Winnipeg 7, St. Vital 1, St. Boniface 1, Fort Garry 1.

Typhoid Fever: Total 6—Brandon 2, Dufferin 1, Pipestone 1, Late Reported: May, Siglunes 2.

Anterior Poliomyelitis: Total 3—Morton 2, Grey 1.

Cerebrospinal Meningitis: Total 2,—Winnipeg 1, Late Reported: May, Selkirk 1.

Lethargic Encephalitis: Total 2—Montcalm 1, Late Reported: February, Unorganized 1.

Puerperal Fever: Total 2—Silver Creek 1, Winnipeg 1.

Undulant Fever: Total 2—Winnipeg 1, Late Reported: May, Whitewater 1.

Anoebic Dysentery: Total 1—Late Reported: February, Souris 1.

Typhoid Carrier: Total 1—Westbourne 1.

Venereal Disease: Total 130—Gonorrhoea 92, Syphilis 38.

DEATHS FROM ALL CAUSES IN MANITOBA
For the Month of May, 1936.

URBAN—Cancer 32, Pneumonia 18, Tuberculosis 6, Measles 4, Syphilis 3, Influenza 2, Scarlet Fever 2, Diphtheria 1, Lethargic Encephalitis 1, Puerperal Septicaemia 1, Typhoid Fever 1, Whooping Cough 1, Erysipelas 1, all others under 1 year 5, all other causes 146, Stillbirths 19. Total 243.

RURAL—Cancer 29, Tuberculosis 20, Pneumonia 18, Influenza 5, Measles 3, Syphilis 2, Infantile Paralysis 1, Lethargic Encephalitis 1, Puerperal Septicaemia 1, all others under 1 year 7, all other causes 168, Stillbirths 14. Total 269.

INDIAN—Tuberculosis 5, Pneumonia 4, Influenza 2, all other causes 11. Total 22.